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Applied Juice Filtration

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Final Report

Applied Juice Filtration

At E&J Gallo Winery Modesto, CA

Major Qualifying Project Proposal

submitted to the Faculty

of the

Worcester Polytechnic Institute

in partial fulfillment of the requirements for a

Bachelor of Science Degree in the field of

Chemical Engineering

By:

Kristin Olson

Date: March 23rd, 2016

Prof. Nikolaos K. Kazantzis, Advisor

Prof. Henry W. Nowick, Advisor

Abstract

The industrial filtration of juice was investigated at E&J Gallo Winery in the Process Technology Research and Development Group. Concepts from filtration literature, chemical engineering principles, and industry practices were integrated to design, construct, and iteratively improve the performance of a small-scale bench-top filtration test. This new test improved the predictive power of the filterability of wine and juice on an industrial scale.

For more information regarding this MQP, please contact Alexander Kopchik at Alexander.Kopchik@ejgallo.com.